

# Osmosis and Diffusion

3. Make observations of the eggs. Other than not having their shell anymore, does it look like it has changed in anyway? If so, how?
4. Use your observations to fill in the table below. Determine which solution was hypertonic and which was hypotonic

	<b>% Sugar Concentration</b>	<b>Apparent Change of Mass (gained or lost)</b>	<b>Hypotonic or Hypertonic (solution surrounding the egg)</b>
Egg 1	0% SUGAR		
Egg 2	50% SUGAR		

## Part II: Iodine and Starch

A dialysis tube is similar to a cell membrane in that it allows certain molecules to pass through, but keeps other molecules out. A starch solution is placed inside the dialysis tubing and then sealed. The tube is then placed in an iodine solution.  $I_2KI$  (iodine), a yellow-brown liquid, turns bluish black when mixed with of starch.

Examine the iodine and starch set up. Answer the questions below.

5. Observe the water in the jar. At the beginning of the setup, the water was an orange color. What color is it now?
6. Observe the dialysis tube. At the beginning of the setup, the inside of the bag was a cloudy white color. What color is it now?
7. Why do you think that the inside of the tube is this color?
8. Why is the jar not a bluish-black color?
9. What two molecules were small enough to pass through the membrane?